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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/056,286	01/24/2002	William B. Kerfoot	10578-014001	9549

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FISH & RICHARDSON PC
225 FRANKLIN ST
BOSTON, MA 02110

EXAMINER

SMITH, MATTHEW J

ART UNIT PAPER NUMBER

3672

DATE MAILED: 10/21/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application N .

10/056,286

Applicant(s)

KERFOOT, WILLIAM B.

Examiner

Matthew J. Smith

Art Unit

3672

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 21 July 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 and 29-41 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3,4,12-14,17,29-33 and 41 is/are rejected.
- 7) ☒ Claim(s) 2, 5-11, 15, 16, and 34-40 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☒ The proposed drawing correction filed on 21 July 2003 is: a) ☒ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

The drawing corrections, filed 21 July 2003, have been accepted by the examiner.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 41 recites the limitation "the first casing" in line 6. There is insufficient antecedent basis for this limitation in the claim. Only "casing" is stated in line 2 and no second casing is defined to link "casing" in line 2 to "the first casing" in line 6. Further, line 10 states "casing".

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 3, 4, 12-14, 17, and 29-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brouwer et al. (5979088) in view of Robertson et al. (5155928).

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Brouwer et al. disclose a casing 8 with extension segment 12; water inlet piping 61; slurry outlet piping 10, movable independent of casing 12 (col. 4, lines 62-63); pipe outlet 60; the casing suitably supported (col. 1, lines 19-22) and delivered; screen or opening with grating 25, submersible slurry pump 4, and hydraulic system 15 for the casing. The reference does not disclose a rotatable, side angled nozzle, a water pump, or water source.

Robertson et al. show a rotatable, side-angled nozzle 26 and a water pump (note col. 2, line 13). The tool 10 is movable from right to left. The tool 10 is also movable in both directions transversely and can also move up and down. Each nozzle emits a jet of high pressure (e.g., 3000 pounds per square inch) water and the effects of these jets are shown by three lines 16, 17, and 18. The tool 10 is designed to cut and excavate a seabed.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to use the Robertson et al. nozzle and pump in the Brouwer et al. device for better operation in both the horizontal and non-horizontal positions (Robertson et al., col.1, lines 17-20). Further, the source of the water, either ambient or from a supply on the dredger, and pipe material would also have been obvious since any liquid the system can pump is acceptable and metal or PVC pipe are well known, respectively.

Claim 41 is rejected under 35 U.S.C. 103(a) as being unpatentable over Brouwer et al. in view of Robertson et al. and Ewig (1750095). Brouwer et al. disclose a casing or core 8; water inlet piping 61 and pump 4; slurry outlet piping 10, movable independent of core 8 (col. 4, lines 62-63); pipe outlet 60; and the casing suitably supported (col. 1, lines 19-22) and delivered. The reference does not disclose a rotatable, side angled nozzle, a sand sprinkler, or a conduit for strata relocation.

Robertson et al. show a rotatable, side-angled nozzle 26 and a pump (note col. 2, line 13). The tool 10 is movable from right to left. The tool 10 is also movable in both directions transversely and can also move up and down. Each nozzle emits a jet of high pressure (e.g., 3000 pounds per square inch) water and the effects of these jets are shown by three lines 16, 17, 18 in the figures. The tool 10 is designed to cut and excavate a seabed.

Ewig reveals sand bar sprinkler d and relocating pipe h. The sieve openings are connected by a network of pipes to a separate pump.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to use the Robertson et al. nozzle and pump in the Brouwer et al. device for better operation in both the horizontal and non-horizontal positions (Robertson et al., col.1, lines 17-20) and to store the slurry and relocate the material, as revealed by Ewig, so that the material can be unloaded (Ewig, page 1, lines 4-9).

Allowabl Subj ct Matt r

Claims 2, 5-11, 15, 16 and 34-40 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

Applicant's arguments filed 21 July 2003 have been fully considered but they are not persuasive. On page 10 of the amendment, applicant points out suction pipe 9 is fixed to pipe 12. If core 8 is considered the casing, then the limitation of -outlet piping within the casing (core) 8 and positionable independent of casing (core)- is met.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Allen et al (5360292) divulge a flexible suction pipe. De Koning (3772805) describes an extensible suction pipe.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew J. Smith whose telephone number is 703-305-5135. The examiner can normally be reached on M-F, 9-4.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David J. Bagnell can be reached on 703-308-2151. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 308-1113.



David Bagnell
Supervisory Patent Examiner
Art Unit 3672

MJS *MJS*
10 October 2003